ASSIGNMENT 10

Textbook Assignment: "Basic Photography," pages 11-1 through 11-42.

- 10-1. What are the two man-made essentials for taking a picture?
 - 1. A camera and a light
 - 2. A film and a camera
 - 3. A light and a film
 - 4. A film and a lens
- 10-2. Modern photographic film is made by using an emulsion to coat which of the following substances?
 - 1. Glass
 - 2. Paper
 - 3. Cellulose or polymer plastic
 - 4. Sheet gelatin
- 10-3. Which of the following groups of components is essential to a camera?
 - A lighttight box, an exposure calculator and an image support
 - An optical system, an image support and a view finder
 - An image support, a lighttight box and an optical system
 - 4. A focusing device, a lighttight box and an optical system
- 10-4. During processing, the developing solution changes the image of the exposed film into a visible image by what conversion process?
 - Metallic silver into silver halides
 - Silver halides into metallic silver
 - Silver halides into soluble salts
 - 4. Soluble salts into metallic silver

- 10-5. Making positive prints of various sizes from a photographic negative involves the use of which of the following equipment?
 - 1. Contact printer
 - 2. Projection printer
 - 3. Printing frame
 - 4. Reducer and enlarger
- 10-6. After exposure but before development, the image on the film is known by what terminology?
 - 1. Latent image
 - 2. Exposed image
 - 3. Halide image
 - 4. Monochromatic image
- 10-7. Which of the following camera features does NOT describe an SLR camera?
 - 1. A mirror reflects the image formed by a single viewing and taking lens onto a viewing screen for focusing
 - A reflex mirror in its focusing and viewing lens gives a reversed and inverted image on a ground-glass screen
 - 3. At the moment of exposure, viewing is disrupted for a split second, as the mirror swings out of the lens-to-film optical path
 - 4. It is not susceptible to the parallax problem
- 10-8. The design of the SLR allows the accomplishment of which of the following functions?
 - Judging the depth of field at a selected aperture
 - 2. Rapid film changing
 - 3. Speedy camera settings
 - 4. All of the above

- 10-9. Which of the following features is 10-13. What material(s) should be used to NOT common to modern SLR cameras?
 - 1. Built-in, through the lens exposure meter
 - 2. Interchangeable lenses with sophisticated leaf shutters
 - 3. Focal plane shutters
 - 4. Interchangeable lenses with iris diaphragm
- 10-10. When you focus a camera, what is actually happening mechanically within the camera?
 - The lens is moving closer or farther from the focal plane
 - The aperture is changing
 - The mirror is moving closer or farther from the focal plane
 - 4. The focal plane angle is changing
- How should you remove a smudge 10-11. from a camera lens?
 - 1. With any tissue only
 - 2. With a lens-cleaning tissue soaked with lens-cleaning solution
 - 3. With a lens-cleaning tissue moistened with one or two drops of lens-cleaning solution
 - 4. Any soft, dry cloth
- How can you determine if a scratch on the lens is bad enough to require its replacement?
 - Any scratch will require replacement
 - 2. Focus the camera on an object, and check for obscured or blurred areas
 - 3. Give the lens to a local photo lab for a prism test
 - 4. Give the lens to your supervisor for his or her determination

- clean a camera body?
 - A soft tissue and cleaning 1. fluid
 - 2. Cotton swab and water
 - 3. Silicon cloth or soft chamois
 - 4. Soft cloth and isopropyl alcohol
- All photographic equipment used in 10-14. picture making, other than cameras and lenses, is referred to by what terminology?
 - Photographic aids 1.
 - 2. Camera accessories
 - 3. Non-optic material
 - 4. Camera bag items

IN ANSWERING QUESTIONS 10-15 THROUGH 10-17, SELECT FROM COLUMN B THE PHRASE THAT DESCRIBES OR APPLIES TO THE EQUIPMENT LISTED IN COLUMN A. NOT ALL RESPONSES ARE USED.

A. EOUIPMENT B. PHRASES 10-15. Autowinder 1. Glass optical element dyed to 10-16. Filters absorb colors selectively 10-17. Lens hoods 2. Shades used to keep sunlight from striking the front of a lens 3. Devices used to increase light efficiency 4. Device that automatically advances exposed film

- 10-18. What direction of lighting produces the most natural form of illumination?
 - Light from directly above the subject
 - Backlight from behind the subject
 - 3. Light from behind the camera and in front of the subject
 - 4. Light from one side and above the subject
- 10-19. The type of lighting you should use to bring out texture and provide depth to the subject is known by what terminology?
 - 1. Frontlight
 - 2. Backlight
 - 3. Light from directly above or below
 - 4. Sidelight
- 10-20. A photojournalist often uses electronic flash for which of the following purposes?
 - 1. To fill in shadow areas
 - 2. To stop a subject's motion
 - 3. To increase illumination
 - 4. All of the above
- 10-21. What lighting technique should you use to photograph a silhouette?
 - 1. Sidelight the subject and overexpose
 - 2. Backlight the subject and underexpose
 - Sidelight the subject and underexpose
 - 4. Overexpose with the subject backlighted
- 10-22. Which of the following is NOT a primary color?
 - 1. Red
 - 2. Blue
 - 3. Green
 - 4. Cyan

- 10-23. You are taking a black and white picture of a blond child standing on a green lawn. She is wearing a pale yellow dress. You can make a more natural-looking photo and make the yellows and greens a darker gray by using what type of filter?
 - 1. Blue
 - 2. Yellow
 - 3. Green
 - 4. Red
- 10-24. You want to photograph an old map that has the important boundaries drawn with red ink. The marks are rather faint in color, so to darken them, you use a filter in what complimentary color?
 - 1. Yellow
 - 2. Red
 - 3. Cyan
 - 4. Magenta
- 10-25. The filter factor, which affects the amount of exposure needed, depends partly on which of the following factors?
 - 1. The color of the filter
 - 2. The latitude of the film
 - 3. The intensity of the light source
 - 4. The aperture setting on the camera
- 10-26. You are using a light red filter with a factor of 8.0 in daylight. The exposure should be increased by, (a) how much and the diaphragm must be opened, (b) how many stops?
 - 1. (a) 2 times; (b) 2 stops
 - 2. (a) 4 times: (b) 3 stops
 - 3. (a) 8 times; (b) 3 stops
 - 4. (a) 8 times; (b) 4 stops
 - 10-27. What term denotes the amount of light that acts upon a photographic film?
 - 1. Intensity
 - 2. Sensitivity
 - 3. Reflection
 - 4. Exposure

- 10-28. What technical error is responsible for ruining more photographs than any other?
 - 1. Wrong filter selection
 - 2. Incorrect exposure
 - 3. Improperly operating flash equipment
 - 4. Wrong film selection
- 10-29. Which of the following terms expresses the formula for exposure?
 - 1. Intensity x time
 - 2. Sensitivity x time
 - 3. Intensity x film speed
 - 4. Time divided by intensity
- 10-30. All except which of the following are factors that govern correct film exposure time?
 - 1. The size of the lens opening
 - 2. The shutter speed
 - 3. The intensity and nature of the light
 - 4. The sensitivity of the film
- 10-31. What term defines the range between the minimum and maximum satisfactory exposures of film?
 - 1. Block
 - 2. Sensitivity
 - 3. Latitude
 - 4. Intensity
- 10-32. Film speed is a measure of what film characteristic?
 - 1. Maximum development time
 - 2. Sensitivity to color
 - 3. Sensitivity to light
 - 4. Minimum development time
- 10-33. What designation is given the universal expression for uniform film-speed standards?
 - 1. USS
 - 2. UEV
 - 3. ISO
 - 4. DIN

- 10-34. Most panchromatic films are sensitive to all visible light in the same degree as the human eye.
 - 1. True
 - 2. False
- 10-35. What type of color film is
 identified by the suffix "color"?
 - 1. Slide film
 - 2. Print film
 - 3. Reproduction paper
 - 4. Transparencies
- 10-36. What does stopping down the lens mean?
 - Increasing the size of the lens aperture
 - 2. Decreasing the size of the lens aperture
 - 3. Decreasing the focal length of the lens
 - 4. Decreasing the speed of the lens
 - 10-37. Which of the following f/numbers is NOT a major step?
 - 1. f/1.4
 - 2. f/2.8
 - 3. f/4.5
 - 4. f/5.6
- 10-38. Which of the following f/stops allows the least amount of light to reach the film?
 - 1. f/5.6
 - 2. f/8
 - 3. f/22
 - 4. f/45

- 10-39. Moving the diaphragm control one 10-43. You want to photograph an object full stop requires doubling the time of exposure. What effect does that setting change have on the aperture opening and the exposure?
 - 1. It increases the aperture opening and doubles the exposure
 - It decreases the aperture opening and halves the exposure
 - 3. It decreases the aperture opening but does not change the exposure
 - 4. It increases the aperture opening but does not change the exposure
- To stop movement or action in a 10-40. picture, you should consider all except which of the following details?
 - 1. The relative movement of the subject
 - 2. The subject's direction of movement

 - 4. The depth of field
- Depth of field depends on all 10-41.except which of the following factors?
 - The focal length of the lens 1.
 - 2. The lens aperture
 - 3. The distance focused on
 - 4. The sensitivity of the film
- 10-42. With a given camera and lens system, what factor affecting the depth of field can NOT be changed by the cameraman?
 - 1. The lens opening
 - 2. The focus distance
 - 3. The focal length of the lens

- in sharp detail with the background out of focus. The object is six feet from your camera lens. What is the best f/stop setting?
 - 1. f/4.5
 - 2. f/11
 - 3. f/16
 - 4. f/32
- IN ANSWERING QUESTIONS 10-44 THROUGH IN ANSWERING QUESTIONS 10-44 THROUGH 10-49, ASSUME THAT THE SUBJECT IS 25 FEET FROM THE CAMERA AND IS MOVING IN THE DIRECTION AS DESCRIBED IN FIGURE 11-21 OF THE TEXTBOOK. SELECT THE RESPONSE OF THE MINIMUM SHUTTER SPEED SETTING FOR EACH ACTION USED AS THE QUESTION.
 - 10-44. A base runner in a baseball game running at right angles to the line of sight of the camera.
 - 1. 1/125 sec
 - 2. 1/250 sec
 - 1/500 sec
 - 4. 1/1000 sec
- 3. The camera-to-subject distance 10-45. A boy riding a bicycle toward you at about 8 miles per hour.
 - 1. 1/125 sec
 - 2. 1/250 sec
 - 3. 1/500 sec
 - 1/1000 sec
 - 10-46. A horse galloping toward you in a diagonal direction.
 - 1. 1/125 sec
 - 2. 1/250 sec
 - 3. 1/500 sec
 - 4. 1/1000 sec
 - 10-47. An automobile accelerating in front of and away from you at about 35 miles per hour.
 - 1. 1/125 sec
 - 2. 1/250 sec
 - 3. 1/500 sec
 - 4. 1/1000 sec

- angles to the motion.
 - 1. 1/125 sec
 - 2. 1/250 sec
 - 3. 1/500 sec
 - 4. 1/1000 sec
- A motor boat moving away from you 10-49. in a diagonal direction at about 8 miles per hour.
 - 1. 1/125 sec
 - 2. 1/250 sec
 - 3. 1/500 sec
 - 4. 1/1000 sec
- 10-50. Other than water, only two solutions are required for basic photographic processing. One is a developer. What is the second solution called?
 - 1. A stop bath solution
 - 2. A fixer
 - 3. A wetting agent
 - 4. A negative preserver
- The solution that causes silver 10-51. halides on exposed film to change chemically into metallic silver is known by what terminology?
 - 1. Fixer
 - 2. Wetting agent
 - 3. Developer
 - 4. Stop bath
- 10-52. The possibility of water spots forming on film as it dries is reduced by what photo processing solution?
 - 1. The hypo
 - 2. Running water
 - 3. The wetting agent
 - 4. The fixer

- 10-48. A football-play taken at right 10-53. Before you open a film cassette or film roll to begin processing, which of the following conditions must exist?
 - 1. The room temperature must be between 50 and 65 degrees
 - 2. The room must be totally dark
 - 3. The room must be illuminated by only a red safety light
 - 10-54. The silver halides not changed to metallic silver are converted into soluble salts by what photo processing solution?
 - The fixer 1.
 - 2. The wetting agent
 - 3. The developer
 - 4. The stop bath
 - 10-55. In processing exposed film, you must perform the following steps:
 - (a) develop the latent image,
 - (b) eliminate the chemicals used,
 - (c) fix the image and (d) stop the action. Which response lists these steps in the proper sequence?
 - 1. b, d, c, a
 - 2. c, a, b, d
 - 3. a, d, c, b
 - 4. a, c, b, d
 - 10-56. Hypo is the common name of the solution used for what purpose?
 - 1. To fix the negative
 - 2. To harden the emulsion on the negative
 - 3. To neutralize the developer
 - 4. To change the silver salts to silver
 - 10-57. When processing film, you should maintain the water within what temperature range in degrees Fahrenheit?
 - 1. 75 to 85
 - 2. 65 to 75
 - 3. 45 to 55
 - 4. 32 to 40

- 10-58. Which of the following data is NOT required on a Navy photo job order?
 - 1. Number of views needed
 - Description of the job to be photographed
 - 3. Type of film to use
 - 4. Size and finish of prints
- 10-59. A system that allows you to take and store photos electronically is known by what terminology?
 - 1. Computer photography
 - 2. Still digital photography
 - 3. Electronic camera
- 10-60. Using your computer, you can send a digital photograph to all except which of the following outlets?
 - 1. Another computer via modem
 - 2. A hard drive for storage
 - 3. A printer for a print
 - 4. A darkroom for further processing
- 10-61. Which of the following is a serious disadvantage in using a still digital camera?
 - 1. The image cannot be cropped
 - 2. The camera needs up to eight seconds between shots
 - The photos are black and white only
 - 4. You cannot tell how many shots you have already taken